

HORTI SELBYANI

FRITZ HAMER AND THE GERMAN TRADITION OF BOTANY IN MESOAMERICA

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Fritz Hamer (1912–2004), the most prominent and perhaps the only authentic expert on the orchids of El Salvador and Nicaragua in the second half of the 20th century, was the last of a long list of German collectors and scientists who played a role in the history of Central American botany and, in particular, orchidology.

From the first years of independent life of the young republics, German botanists showed great interest in Mesoamerica. It all began with the German Carl Sartorius (1796–1872), who in 1826 acquired the legendary hacienda El Mirador in the Mexican state of Veracruz. El Mirador would become the meeting point for all naturalists who visited the area and perhaps the most frequently mentioned locality of collection during the 19th century. Among its first guests were Ferdinand Deppe, Count of Sack (1794–1861), and Christian Julius Wilhelm Schiede (1789–1836), who in 1828 discovered numerous new orchid species in El Mirador and described *Trevirana grandiflora* (Gesneriaceae). Friedrich Ernst Leibold (1804–1864) arrived in 1839, as did Ludwig Hahn (1836–1881) in 1855. Carl Albert Purpus (1851–1942) and Johann Heinrich Rudolf Schenck (1860–1927) also collected at El Mirador in the 1890s and in the first years of the 20th century.

George U. Skinner had the German Carl R. Klee (who also collected orchids) as his partner and was host to Karl Theodor Hartweg (1812–1871). Hartweg came to Mexico in 1836 and went on to Guatemala, where he collected until 1841. The Prussian Augustus Fendler (1813–1883) was in Nicaragua in 1846, where he collected a small number of plants near Greytown (San Juan del Norte) before going on to Panama in 1850. Of great importance was the work of Berthold Carl Seemann (1825–1871), who formed part of the expedition of the *HMS Herald* and explored Panama and Mexico between 1847 and 1851, returning in 1865 to Nicaragua, where he died. Also in Panama were Hans Hermann Behr (1818–1904) in 1848 and Karl Theodor Mohr (1824–1901) in 1857. Moritz Wagner (1813–1887) came to Costa Rica in 1853 and collected later in each of the Central American

countries, before continuing to South America. Carl Hoffmann (1833–1859) and Julian Carmiol (1807–1885) arrived in Costa Rica in 1854. In 1856, they were joined by Hermann Wendland (1825–1903), who previously had been in Guatemala, El Salvador, and Nicaragua. In 1855, Heinrich Rudolf Wulfschlaegel (1805–1864) was briefly in Nicaragua's Mosquito Coast, where he collected several species of orchids new to science.

The specimens gathered by these collectors were studied and identified almost exclusively by the German orchidologist Heinrich Gustav Reichenbach (1824–1889), who described many of these species new to science in his *Contributions to the Orchidology of Central America*, published in Hamburg in 1866. The Royal Botanical Museum of Berlin, founded in 1879, maintained the most important collections of Central American orchids, until the museum building was destroyed during World War II.

A new wave of German collectors in Central America began with Carl Kramer, who came to Costa Rica in 1866. Gottlieb Zahn traveled through Central America in 1869–1870, followed by Gustav Wallis (1830–1878), who was in Panama and Costa Rica in 1875. As one of many fortune-seeking Germans who traveled to the tropics, Baron Hans von Tuerckheim (1853–1920) arrived in Guatemala in 1877 and made major contributions to the knowledge of the orchidaceous flora of that country. Friedrich Carl Lehmann (1850–1903) traveled in the early 1880s through Costa Rica, Panama, and Guatemala. Gustav Niederlein (1858–1924) collected in Honduras in 1897, at the same time as Carl Thieme, who lived in San Pedro Sula. Reverend Heinrich Theophile Heyde and his nephew Ernest Lux collected extensively in Guatemala from 1889 to 1894. Georg Eduard Seler (1849–1922) and his wife Caecilie Seler-Sachs (1855–1933), well known for their fundamental studies of the pre-Columbian cultures, made important orchid collections in Guatemala and Chiapas in 1887–1899 and in Yucatan in 1902–1911. Albert Wendt (1887–1958) was in Guatemala in 1900.

The successor to Reichenbach in identifying

orchid species new to science was Friedrich Richard Rudolf Schlechter (1872–1925), who began his studies about Mesoamerican orchids in the first decade of the 20th century. Schlechter wrote a summary of the orchids of Central America in his work, *Critical Enumeration of All Hitherto Known Orchids of Central America* (1918), in which he mentions 132 orchid genera with 1325 species for all of Central America and Mexico. The lack of knowledge at that time regarding the orchid flora of some countries is notorious. As an example, Schlechter mentions only eight orchid species for Belize, 13 species for El Salvador, and 57 species for Nicaragua.

The brothers Alexander Curt Brade (1881–1971) and Alfred Brade (1867–1955) came to Costa Rica in 1893 and 1908, respectively. Alexander Curt Brade later would become famous as one of Brazil's foremost orchidologists. Franz Eccarius Schramm (1873–1949) collected in 1924 along the Mosquito Coast, following in the footsteps of Wulfschlaegel. Guillermo Acosta Piepper (1878–1955) and Otón Jiménez Luthmer (1895–1988)—both with German mothers—played a major role in the orchidology of Costa Rica.

After World War I, and especially after Schlechter's premature death, German influence on the orchidology of Central America began to decline. A few names, however, can still be mentioned. The entomologist Wilhelm Heinrich Ferdinand Nevermann (1881–1938) made some interesting collections in the Atlantic region of Costa Rica in 1922–1935. Clarence Klaus Horich (1930–1994) collected intensively in El Salvador, Guatemala, Honduras, and Costa Rica (after 1957). Sieghart Winkler collected in El Salvador in 1962, and Otto Tinschert has made important studies on the orchids of Guatemala during the last 40 years.

THE HAMER YEARS

We turn now to Fritz Hamer, who was born in Hamburg, Germany, on November 22, 1912, where he grew up and received his education in business in a Dutch-owned export company. In 1936 his company sent him to Venezuela and a year later to Guatemala, where the onset of World War II found him. Although he owned a farm in Guatemala, he was expatriated in 1942 to Germany, where he served in the Army during the Russian campaign. At the end of the war, he went back to Guatemala for a short period of time and established himself later in El Salvador, where he formed a successful company that imported and distributed auto parts.

His interest in orchids started relatively late in life. Around 1960, someone gave him a *Milton-*

ia, which caught his artistic eye and led to his first orchid drawing. He began exploring the country in search of orchids, which he cultivated patiently, preparing photographs, illustrations, and descriptions. Hamer soon discovered the lack of an adequate bibliography about the orchids of his adoptive country. After *Preliminary List of the Plants of El Salvador* (Standley & Calderón 1925), in which 63 species of orchids in 28 genera were described, nothing else had been published about the orchid flora of El Salvador. Thus motivated, Hamer, who had already published a few articles on Salvadorian orchids in *Orquideología* in 1971, began preparation of his original work, *The Orchids of El Salvador*. The first two volumes, which described 279 species in 67 genera, were published in 1974 by the Ministry of Education of El Salvador. Social and political unrest, which later led to civil war, influenced Hamer to abandon El Salvador and move to Florida, where he joined the scientific staff of the Marie Selby Botanical Gardens. In 1981, the third volume of his work was published by Selby Gardens, bringing the number of Salvadorian orchids to 362 species in 93 genera.

Alfonso H. Heller (1894–1973), an American of German origin, died of a coronary in 1973 while watering the garden of his large estate high up in the hills overlooking Managua, the capital of Nicaragua. Heller, who had studied the orchids of Nicaragua since 1957, left a truckload full of information on local orchids with drawings, descriptions, color slides, and specimens of dried plants of Orchidaceae, as well as a large and valuable library, which were donated by Christiane Heller to the Marie Selby Botanical Gardens, then under the directorship of Calaway H. Dodson. The donation was made with the understanding that arrangements would be made to use Heller's work for a publication, and Dodson invited Hamer, who still resided in El Salvador, to have a look at Heller's material. Then there was another development. The Missouri Botanical Garden had committed itself to preparing a *Flora de Nicaragua*, in cooperation with the University of Managua, and Hamer was asked to take over the family of orchids within that *Flora*. With Heller's material as a base, Hamer visited the herbaria at Kew, the Field Museum in Chicago, the Escuela Agrícola Panamericana at "El Zamorano" in Honduras, at Managua, and at the University of Michigan. His travels uncovered more plant material available from former expeditions to Nicaragua. Fascicle seven of the first series of *Icones Plantarum Tropicalium*, edited by Dodson, which contained the first 100 descriptions and illustrations by Hamer on the orchids of Nicaragua, was published in 1982.

During the next years, Hamer published 500 additional plates for the *Icones*. Thus it was again Hamer, who filled a void in the bibliography of the orchids of Central America. Ever since the doubtful *Flora Nicaragiense* of Miguel Ramírez Goyena (1909), in which 94 species were listed, nothing else had been published about the orchidaceous flora of that country. Between 1988 and 1990, Hamer published in the scientific journal *Selbyana* (Vol. 10 supplement and Vol. 11 supplement) his *Orchids of Central America—An Illustrated Field Guide*, in which he reproduced all his illustrations of the orchids of the region, although without descriptions. The *Flora de Nicaragua* project of the Missouri Botanical Garden finally became a reality in 2001, and again it was Hamer, already 89 years of age, who authored the chapter on Orchidaceae, describing 587 species in 144 genera.

A fundamental author for the knowledge of the orchids of the Central American region, Hamer also collaborated with Carlyle A. Luer, translating into German the seven volumes of *Thesaurus Dracularum* (1988–1994) and the first six volumes of *A Treasure of Masdevallia* (1996–2001).

During his life, Hamer published the following 14 new species and 15 new combinations of Orchidaceae:

- Bulbophyllum bandischii* Garay, Hamer & Siegerist
- Bulbophyllum burfordiense* Garay, Hamer & Siegerist
- Bulbophyllum fraudulentum* Garay, Hamer & Siegerist
- Bulbophyllum kegelii* Hamer & Garay
- Cyrtopodium punctatum* Lindl. var. *salvadorense* Hamer & Garay
- Dichaea muricatoides* Hamer & Garay
- Epidendrum glumarum* Hamer & Garay
- Isochilus aurantiacus* Hamer & Garay
- Isochilus pitalensis* Hamer & Garay
- Mormodes* × *salvadorensis* Hamer & Garay
- × *Myrmecolaelia fuchsii* Hamer
- Neo-urbania nicaraguensis* Hamer & Garay
- Oncidium cheiroporum* Rchb.f. var. *exauriculatum* Hamer & Garay
- Synarmosepalum kettridgei* Garay, Hamer & Siegerist
- Beloglottis ecallosa* (Ames & C.Schweinf.) Hamer & Garay
- Calanthe calanthoides* (Rich. & Galeotti) Hamer & Garay
- Cirrhopetalum gusdorfii* (J.J.Sm.) Garay, Hamer & Siegerist
- Cirrhopetalum gusdorfii* var. *johorensis* (Holtum) Garay, Hamer & Siegerist
- Eltroplectris roseoalba* (Rchb.f.) Hamer & Garay

- Encyclia dickinsoniana* (Withner) Hamer
- Epidendrum pseudopygmaeum* (Finet) Hamer & Garay
- Jacquinella teres* (Rchb.f.) Hamer & Garay
- Miltonioides pauciflora* (L.O.Williams) Hamer & Garay
- Neolehmannia curvicolonna* (F.Ames, T.Hubb. & C.Schweinf.) Hamer
- Oerstedella myriantha* (Lindl.) Hamer & Garay
- Oerstedella verrucosa* (Sw.) Hamer & Garay
- Oerstedella schweinfurthiana* (Correll) Hamer & Garay
- Pachystele minuta* (A.Rich. & Galeotti) Hamer & Garay
- Scaphyglottis minuta* (A.Rich. & Galeotti) Hamer & Garay.

In addition, the following species were described based on collections by Hamer and dedicated to him: *Beloglottis hameri* Garay; *Pelexia hameri* Garay, and *Ponthieva hameri* Dressler. Another species dedicated to him is *Epidendrum hameri* Hágsater & L.Sánchez.

Hamer was married for 42 years to Hedwig Pfister, a neurologist, to whom he dedicated one of the new species he had discovered: *Maxillaria hedwigae* Hamer & Dodson.

He had three sons, one of whom was murdered in 2003 by kidnappers in El Salvador. Overwhelmed by this tragedy, which cast a shadow over the last months of his life, Fritz Hamer passed away in Sarasota, Florida, on January 13, 2004.

LITERATURE CITED

- Hamer, F. 1971. Orquídeas Interesantes de El Salvador. *Orquideología* 6: 155–159, 219–223.
- . 1974. Las Orquídeas de El Salvador, Tomos I y II. Ministerio de Educación. Dirección de Publicaciones, San Salvador, El Salvador, C.A.
- . 1981. Las Orquídeas de El Salvador, Tomo III. Marie Selby Botanical Gardens. Sarasota, Florida (text in Spanish, English, and German).
- . 1982. Orchids of Nicaragua. *Icones Plantarum Tropicarum*, Fascicles 7–9 (Plates 601–900). Marie Selby Botanical Gardens. Sarasota, Florida.
- . 1984. Orchids of Nicaragua. *Icones Plantarum Tropicarum*, Fascicles 11–12 (Plates 1001–1200). Marie Selby Botanical Gardens. Sarasota, Florida.
- . 1985. Orchids of Nicaragua. *Icones Plantarum Tropicarum*, Fascicle 13 (Plates 1201–1300). Marie Selby Botanical Gardens. Sarasota, Florida.
- . 1988. Orchids of Central America: An Illustrated Field Guide. *Selbyana* 10(Suppl.): 1–422 (A–L).
- . 1990. Orchids of Central America: An Illustrated Field Guide. *Selbyana* 11(Suppl.): 423–860 (M–Z).
- . 2001. Orchidaceae, in *Flora de Nicaragua*. Monographs in Systematic Botany from the Missouri Botanical Garden. 85(II): 1612–1853.

**Publications by Fritz Hamer
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- ☐ *The Orchids of El Salvador, III* (text in Spanish, English, and German), 1981.
- ☐ Orchids of Nicaragua. *Icones Plantarum Tropicarum*, Fascicles 7–9 (Plates 601–900). 1982.
- ☐ Orchids of Nicaragua. *Icones Plantarum Tropicarum*, Fascicles 11–12 (Plates 1001–1200), 1984.
- ☐ Orchids of Nicaragua. *Icones Plantarum Tropicarum*, Fascicle 13 (Plates 1201–1300), 1985.
- ☐ Orchids of Central America: An Illustrated Field Guide. *Selbyana* 10(Suppl.): 1–422 (A–L), 1988.

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